

Appendix 4B-1: Annual Water Budgets for the Old Everglades Nutrient Removal Project

	Inflows ^b				Outflows				ΔS	r	ε
	I_s	I_g	P	Σ_{inflow}	O_s	O_g	ET	$\Sigma_{outflow}$			
ENRP											
WY 95-96	256.4	9.3	19.9	285.6	212.8	45.7	19.9	278.4	2.0	5.2	1.8%
WY 96-97	177.7	6.8	22.0	206.6	147.0	46.6	20.2	213.8	-2.6	-4.6	-2.2%
WY 97-98	130.2	14.0	23.0	167.2	99.9	50.4	18.9	169.3	3.6	-5.6	-3.4%
WY 98-99	154.6	8.3	18.4	181.3	106.5	50.9	22.3	179.7	-2.3	3.9	2.1%
WY 99-00	199.1	9.1	20.4	228.6	149.5	48.8	20.3	218.6	2.0	8.0	3.5%
WY 00-01	140.9	4.1	13.8	158.8	69.6	43.2	22.0	134.8	-5.3	29.9	18.4%
TOTAL	1058.9	51.6	117.6	1228.1	785.4	285.6	123.7	1194.6	-2.7	36.1	2.9%
	86.2%	4.2%	9.6%		65.7%	23.9%	10.4%				
Buffer Cell											
WY 95-96	256.4	-	0.7	257.0	224.3	7.4	0.7	232.4	0.1	24.5	9.4%
WY 96-97	177.7	-	0.8	178.5	149.8	7.6	0.7	158.1	-0.1	20.6	11.5%
WY 97-98	130.2	-	0.8	131.1	118.8	8.2	0.7	127.7	0.2	3.2	2.4%
WY 98-99	147.4	-	0.6	148.1	124.7	8.1	0.8	133.6	-0.3	14.8	10.0%
WY 99-00	-	-	-	-	-	-	-	-	-	-	-
WY 00-01	-	-	-	-	-	-	-	-	-	-	-
TOTAL	711.7	-	2.9	714.6	617.5	31.3	2.9	651.7	-0.2	63.1	8.8%
	99.6%	-	0.4%		94.8%	4.8%	0.4%				
Treatment Cell 1											
WY 95-96	100.1	4.0	6.8	110.9	102.4	0.1	6.8	109.3	0.8	0.8	0.8%
WY 96-97	57.5	3.0	7.5	68.0	58.4	0.2	6.9	65.4	-0.9	3.5	5.8%
WY 97-98	41.5	6.1	7.8	55.4	43.0	0.0	6.5	49.6	1.2	4.7	8.4%
WY 98-99	47.5	3.6	6.3	57.4	52.2	0.5	7.7	60.4	-0.7	-2.3	-4.0%
WY 99-00	177.1	4.0	7.5	188.5	148.5	6.7	7.6	162.8	0.7	25.0	13.3%
WY 00-01	139.4	1.8	5.2	146.4	106.7	7.5	8.3	122.5	-2.0	25.9	17.7%
TOTAL	563.2	22.4	41.1	626.7	511.3	15.0	43.8	570.1	-0.9	57.5	9.2%
	89.9%	3.6%	6.6%		89.7%	2.6%	7.7%				
Treatment Cell 2											
WY 95-96	124.2	-	5.3	129.5	116.1	22.4	5.3	143.8	0.5	-14.8	-11.4%
WY 96-97	92.3	-	5.9	98.2	89.9	22.8	5.4	118.1	-0.9	-19.0	-19.4%
WY 97-98	77.3	-	6.2	83.4	73.5	24.8	5.1	103.3	1.2	-21.1	-25.3%
WY 98-99	77.1	-	4.9	82.0	62.6	24.5	6.0	93.0	-0.6	-10.4	-12.7%
WY 99-00	73.0	-	5.5	78.5	70.9	23.8	5.4	100.1	0.6	-22.3	-28.4%
WY 00-01	46.3	-	3.7	50.0	49.2	20.5	5.9	75.6	-1.9	-23.8	-47.5%
TOTAL	490.2	-	31.4	521.6	462.1	138.7	33.1	633.9	-1.0	-111.3	-21.3%
	94.0%	-	6.0%		72.9%	21.9%	5.2%				
Treatment Cell 3											
WY 95-96	102.4	5.3	5.2	112.9	88.2	7.4	5.3	100.8	0.5	11.6	10.3%
WY 96-97	58.4	3.9	5.8	68.0	61.9	7.6	5.3	74.9	-0.4	-6.4	-9.5%
WY 97-98	43.0	7.9	6.0	56.9	35.7	8.1	5.0	48.8	0.6	7.5	13.2%
WY 98-99	59.4	4.7	4.8	68.9	52.4	8.6	5.9	66.9	-0.6	2.6	3.8%

WY 99-00	99.8	5.2	5.3	110.3	77.6	8.0	5.4	91.0	0.5	18.8	17.1%
WY 00-01	61.8	2.3	3.6	67.7	32.8	7.6	5.8	46.2	-1.0	22.5	33.2%
TOTAL	424.8	29.2	30.8	484.8	348.6	47.3	32.6	428.5	-0.4	56.7	11.7%
	87.6%	6.0%	6.3%		81.3%	11.0%	7.6%				
Treatment Cell 4											
WY 95-96	116.1	-	1.9	117.9	110.0	8.4	1.9	120.3	0.1	-2.5	-2.1%
WY 96-97	89.9	-	2.1	92.0	83.4	8.5	1.9	93.9	-0.2	-1.6	-1.7%
WY 97-98	73.5	-	2.2	75.7	63.9	9.3	1.8	75.0	0.4	0.2	0.3%
WY 98-99	62.6	-	1.8	64.3	53.3	9.2	2.1	64.6	-0.2	<0.0	-0.1%
WY 99-00	70.9	-	1.9	72.8	71.9	8.9	1.9	82.8	0.2	-10.1	-13.9%
WY 00-01	49.2	-	1.3	50.5	36.8	7.7	2.1	46.6	-0.5	4.3	8.9%
TOTAL	462.1	-	11.2	473.3	419.4	51.9	11.8	483.1	-0.3	-9.5	-2.0%
	97.6%	-	2.4%		86.8%	10.7%	2.4%				

^aAll water budget terms expressed as hm³, where 1 hm³ = 1,000,000 m³ = 810.7 ac-ft; water years run from May 1 to April 30 of the following calendar year.

^bI_s = total surface water inflow, I_g = total groundwater inflow, P = precipitation, O_s = total surface water outflow, O_g = groundwater outflow, ET = evapotranspiration, ΔS = change in storage capacity, r = water budget residual, ε = water budget error.